

In the claims:

1. (Currently Amended) A design for constructing an input circuit to receive and process an electrical signal, such as a voltage signal from a voltage source, specifically from a sensor where the input circuit has an extremely high input resistance of at least 10^{11} ohms and is located on a printed circuit board, where a first area carrying input circuit components of the printed circuit board is separated by a channel-shaped recess from a surrounding second area, characterized in that the channel-shaped recess terminates in the interior of the printed circuit board and is extended in the direction of the thickness of the printed circuit board [as far as] beyond a moisture-impermeable barrier layer which underlies the first area of the printed circuit board, and in that the channel-shaped recess and the first area are filled and enclosed by a cohesive moisture-impermeable sealing material.

2. (Previously Amended) The design in accordance with claim 1, wherein the moisture-impermeable barrier layer is a metallic layer.

3. (Previously Amended) The design in accordance with claim 2, wherein the metallic layer forms a flat layer inside the printed circuit board and is configured uninterruptedly at least under the first area.

4. (Previously Amended) The design in accordance with claim 1, wherein the printed circuit board is made from an FR4 material, which has at least one moisture-impermeable barrier layer in its interior.

5. (Currently Amended) [The] A design [in accordance with claim 1,] for constructing an input circuit to receive and process an electrical signal, wherein the input circuit has an extremely high input resistance of at least 10^{11} ohms and is located on a printed circuit board, where a first area carrying input circuit components of the printed circuit board is separated by a channel-shaped recess from a surrounding second area, characterized in that the channel-shaped recess terminates in the interior of the printed circuit board and is extended in the direction of the

thickness of the printed circuit board at least as far as a moisture-impervious barrier layer which underlies the first area of the printed circuit board, and in that the channel-shaped recess and the first area are filled and enclosed by a moisture-impermeable sealing material, and in that walls of the printed circuit board bordering the channel-shaped recess are provided with a moisture-impermeable coating.

6. (Currently Amended) [The] A design [in accordance with claim 5,] wherein for constructing an input circuit to receive and process an electrical signal, wherein the input circuit has an extremely high input resistance of at least 10^{11} ohms and is located on a printed circuit board, where a first area carrying input circuit components of the printed circuit board is separated by a channel-shaped recess from a surrounding second area, characterized in that the channel-shaped recess terminates in the interior of the printed circuit board and is extended in the direction of the thickness of the printed circuit board at least as far as a moisture-impervious barrier layer which underlies the first area of the printed circuit board, and in that the channel-shaped recess and the first area are filled and enclosed by a moisture-impermeable sealing material, and in that walls of the printed circuit board bordering the channel-shaped recess are provided with a moisture-impermeable coating, and in that the coating is formed from a metal alloy, which is attached in a fluid-tight manner to the barrier layer.

7. (Previously Amended) The design in accordance with one of the preceding claims, wherein the moisture-impermeable sealing material is manufactured on a epoxy base or on a high-density polyethylene base or on a liquid resin base.

8. (Previously Amended) A circuit card for measurement processing equipment characterized by a design in accordance with claim 1.